Claim Amendments

1. (currently amended)~~a~~ A method for measuring ~~the~~ DNA-structure specific binding activity of a test protein comprising the steps of:
   a) Immobilizing a single DNA substrate comprising a specific DNA structure to a solid support, then~~C~~contacting ~~a nucleic acid~~the DNA substrate ~~comprising a specific structure immobilized on a solid support~~ with a test protein or mixture of proteins; and
   b) ~~detecting~~ Detecting the protein or mixture of proteins from step (a) ~~bound to the immobilized nucleic acid substrate.~~ while the DNA substrate is still bound to the solid support.

2. (original) The method according to claim 1, wherein the solid support is a microtiter plate.

3. (canceled) The method according to claim 1, wherein the immobilized nucleic acid substrate comprises DNA.

4. (currently amended) The method according to claim ~~3~~1, wherein the DNA is damaged.

5. (original) The method according to claim 1, wherein the nucleic acid structure comprises DNA ends.

6. (original) The method according to claim 4, wherein the damaged DNA comprises UV- irradiated DNA.

7. (original) The method according to claim 1, wherein the test protein comprises a cell extract.

8. (original) The method according to claim 1, wherein the test protein comprises a DNA repair protein.

9. (currently amended) The method according to claim 1, wherein the ~~DSSBP~~ test protein is detected by contacting the solid support of step (b) with an antibody.

10. (original) The method according to claim 9, wherein said antibody comprises an anti-DNA-PK antibody.

11. (original) The method according to claim 8, wherein the DNA repair protein comprises DNA-PK.

12. (currently amended) A method for measuring an ~~the DSSBP modulating~~ ability of a test substance to modulate a DNA-structure specific binding proteincomprising the steps of:

a) Contacting a ~~nucleic acid~~single DNA substrate comprising a specific structure immobilized on a solid support with a test substance to produce a reaction premix;

b) Contacting the reaction premix of step (a) with a ~~DSSBP capable of binding the immobilized substrate~~DNA-structure specific binding protein to produce a reaction mix; and

c) Detecting the protein from step (b) while the DNA substrate is still bound to the solid support.

13. (canceled) The method of claim 12, wherein the reaction mix is further subjected to a process whereby the DSSBP is detected.

14. (original) The method according to claim 12, wherein the solid support is a microtiter plate.

15. (canceled) The method according to claim 12, wherein the immobilized nucleic acid substrate comprises DNA.

16. (currently amended) The method according to claim ~~15~~12, wherein the DNA is damaged.

17. (original) The method according to claim 12, wherein the nucleic acid structure comprises DNA ends.

18. (original) The method according to claim 16, wherein the damaged DNA comprises UV- irradiated DNA.

19. (currently amended) The method according to claim 12, wherein the ~~DSSBP~~ DNA-structure specific binding protein comprises a DNA repair protein.

20. (currently amended) The method according to claim ~~13~~12, wherein the ~~DSSBP~~ DNA-structure specific binding protein is detected by contacting the solid support with an antibody.

21. (original) The method according to claim 20, wherein said antibody comprises an anti-DNA-PK antibody.

22. (currently amended) The method according to claim ~~9~~19, wherein the DNA repair protein comprises DNA-PK.

23. (new) A method for measuring an ability of a test substance to modulate a DNA-structure specific binding proteincomprising the steps of:

a) Contacting a DNA-structure specific binding protein with a test substance to produce a reaction premix;

b) Contacting the reaction premix of step (a) with a single DNA substrate comprising a specific structure immobilized on a solid support to produce a reaction mix; and

Q1 cont

c) Detecting the protein from step (b) while the DNA substrate is still bound to the solid support.